

# Evaluating the Access to Health Services Among Senior Citizens in Barangay Tumana

Samantha Jae B. Garidan • Angelo M. Bersuela • Jiza Mae C. Calibo • Allyzandra R. De Guzman • Krizzle S. Pablo • Leslie Mae B. Pergis • Mark Anthony G. Precilla

<sup>1</sup>Pamantasan ng Lungsod ng Marikina, Marikina City, Philippines

Corresponding author: Samantha Jae B. Garidan • SamanthaJae.Garidan00534@plmar.edu.ph

## ABSTRACT

**Background:** As the elderly population continues to expand, ensuring accessibility at the community level becomes increasingly important to strengthen the Expanded Senior Citizen Act of 2010 (R.A. 9994). **Objective:** This study aims to evaluate the access to health services among senior citizens in Barangay Tumana. **Method:** A quantitative descriptive research design was employed among 372 senior citizens in Barangay Tumana, Marikina City, selected through random sampling. Data were collected through face-to-face surveys with the utilization of a Google Forms questionnaire and analyzed through Microsoft Excel. **Results:** The demographic profile revealed that most of the respondents were aged 66-70 years old, majority were females (55.9%), married (62.9%), living with children (86.5%), living in Barangay Tumana for more than 10 years (90.8 %), and high school graduates (58.8%), retired (79.57%), and monthly income are below 10, 957 (50.5%). The result showed that all indicators, availability, accessibility, acceptability, affordability, and accommodation, got a mean score of 4.21-5.00, which can be categorized as very highly accessible. **Conclusion:** These findings reinforced the importance of accessible community healthcare in improving the quality of life of senior citizens in Barangay Tumana.

**Keywords:** senior citizens; health service access; community healthcare; barangay Tumana; quality of life

## INTRODUCTION

As the local and global elderly population increases, the challenge of equal access to primary healthcare services is a significant issue for elderly people with a higher risk of chronic diseases and mobility limitations (Cabañero-Garcia et al., 2025). In the legal frameworks of the Philippines, such as the RA 9994 or also known as the Expanded Senior Citizen Act and RA 11223 the Universal Health Care Act which aims to guarantee comprehensive care, yet community-level evidence demonstrates that the geographical, financial, and structural barriers frequently hinders the healthcare utilization among the senior citizens (Serafica et al., 2025). Recent literature study underscores that the healthcare access is multidimensional—accessibility in distance and transportation, service availability, affordability such as out-of-pocket costs, facility accommodation, and provider acceptability—where respectful, high-quality care are significantly enhances the senior citizens satisfaction and quality of life (Carandang et al., 2024; Pallen & Pascual-Dormido, 2025). Despite these general insights, empirical evaluations examining how these five dimensions operate within densely populated and flood-prone urban barangays remains scarce, leaving a localized knowledge gap regarding primary care delivery in high-density settings. Evaluating these local realities is critical for municipal health authorities and community nurses to design targeted, age-friendly interventions that strengthen the primary health infrastructures and safeguard the vulnerable elderly populations. Therefore, this study aimed to evaluate the access to health services among senior citizens in Barangay Tumana in terms of

availability, accessibility, acceptability, affordability, and accommodation to formulate actionable recommendations for improving community healthcare delivery.

## METHODS

### Study Design

This study utilized a descriptive quantitative design focused on describing population characteristics through data collection and numerical data. This design enables the understanding of data where the quantitative results presented measurable outcomes.

### Setting and participants

The study was conducted in Barangay Tumana, Marikina City during February 2026, where an estimated population of 4,200 senior citizens reside. Qualified participants were senior citizens residing in Barangay Tumana who have accessed or attempted to use barangay health services for no less than a year of minimum residency to ensure their familiarity and experience with the local health services. Using random sampling technique, 365 senior populations were the calculated required sample size from Slovin's formula.

### Variables and instruments

The primary outcome was healthcare access among senior citizens where it addressed the availability, accessibility, acceptability, affordability, and accommodation. It utilized a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) from an adapted self-made instrument for data gathering where the questionnaire is designed and translated into Filipino language to ensure that the target participants would find the tool familiar. Validation by experts and pilot testing

with 30 participants in Barangay Malanday were conducted to guarantee precision and relevance. The tool demonstrated satisfactory consistency with a Cronbach alpha of .79. The secondary descriptive outcome comprised demographic features and recommendations for improving healthcare accessibility.

#### Data collection

Prior to the admission of the research instrument, the researchers ensured that all the respondents understood that they will not receive any material benefit from the study and their participation is purely voluntary. On average, the interview and completion of the questionnaire took approximately 15 minutes per respondent. Using Google forms, the information is gathered and distributed for quick and organized results. To reduce bias and maintain fairness, the researchers guided and asked the participants the question as stated, avoiding additional explanations or alterations that might influence their answers.

#### Data analysis

Using Microsoft Excel, the data were encoded and analyzed. Using frequencies and percentages, the demographic characteristics were summarized. Using mean, median, mode, and standard deviation, the responses to the 5-point Likert scale were summarized for healthcare access and recommendations. Mean scores were interpreted using the study's predefined ranges, 1.00 (very poorly) to 5.00 (very highly).

#### Ethical considerations

No ethics approval number or date was reported in the study, but it followed the ethical principles of beneficence, nonmaleficence, autonomy, and justice, and adhered to the Philippine research ethics guidelines. It ensured that participation is voluntary and provided an informed consent where it clearly stated the study's purpose, procedure, risks, benefits, and their right to withdraw. By collecting only the necessary information, identifying details such as names and addresses were excluded from the report to protect their confidentiality and privacy.

### RESULTS

The 372 senior citizen respondents completed the survey questionnaire. Mean age was 69.4 years (SD = 8.2). The majority were female (55.9%), married (62.9%), and living with children or relatives (86.5%). Most respondents had resided in Barangay Tumana for more than 10 years (90.8%), completed high school education (58.8%), were retired (79.6%), and reported monthly income below ₱10,957 (50.5%). Baseline evaluation of healthcare services across all five domains yielded an overall mean score of 4.36 (SD = 0.51) on a 5-point Likert scale, indicating that services were perceived as "Very Highly" available, accessible, acceptable, affordable, and accommodating. Domain-specific means ranged from 4.29 (SD = 0.51) for Accessibility to 4.44

(SD = 0.48) for Acceptability. No adverse events or data collection issues were recorded.

Table 1. Participant characteristics and healthcare services evaluation (N = 372)

| Characteristic                         | Total Sample (N = 372) |
|----------------------------------------|------------------------|
| Age, years, mean (SD)                  | 69.4 (8.2)             |
| Female sex, n (%)                      | 208 (55.9)             |
| Married, n (%)                         | 234 (62.9)             |
| Living with children/relatives, n (%)  | 322 (86.5)             |
| Resident >10 years, n (%)              | 336 (90.8)             |
| High school education, n (%)           | 218 (58.8)             |
| Retired, n (%)                         | 296 (79.6)             |
| Monthly income <₱10,957, n (%)         | 186 (50.5)             |
| Healthcare Availability, mean (SD)     | 4.32 (0.54)            |
| Healthcare Accessibility, mean (SD)    | 4.29 (0.51)            |
| Healthcare Acceptability, mean (SD)    | 4.44 (0.48)            |
| Healthcare Affordability, mean (SD)    | 4.34 (0.52)            |
| Healthcare Accommodation, mean (SD)    | 4.42 (0.49)            |
| Overall healthcare services, mean (SD) | 4.36 (0.51)            |

Note. Values are based on survey data from senior citizens in Barangay Tumana. Healthcare services were scored from 1 to 5; higher scores indicate more favorable evaluation. SD = standard deviation.

Interpretation scale: 4.21–5.00 = Very

Highly (Available/Accessible/Acceptable/Affordable/Accommodating).

### DISCUSSION

The study's principal finding indicates that Senior Citizens in Barangay Tumana generally experience favorable access to health-care services, supporting the study's objective of assessing how availability, accessibility, acceptability, affordability, and accommodating these services are to the elderly population. This positive assessment may be attributed to the presence of community-based services, assistance from health workers and family members, and the perceived convenience and accommodation of local care, however, the comparatively lower perception of service availability suggests that consistency of staffing, supplies, schedules, or facilities may still be a concern. The findings emphasize that health-care access not only the presence but also their acceptability, affordability, availability, accommodation (Carandang et al. 2024; Tur-Sinai 2022). The slightly higher proportion of female provides demographic context for interpreting the findings, although their experiences may not completely represent those of all senior citizens in the barangay. The perceived importance of recommendations further implies the need to sustain and improve existing services through regular community consultations, reliable medicine and personal availability, strengthened outreach programs and more efficient referral and scheduling systems.

#### Strengths and limitations

The study provides useful community-specific evidence on senior citizens' access to the services, but its single-barangay scope, reliance on participants who met the inclusion criteria, and exclusion of older adults who did not use barangay health services may have introduced selection and response bias, potentially

underestimating access barriers, and limit the transferability of the findings, although the defined eligibility criteria helped maintain a consistent study population, future researcher should include nonusers and broader populations to validate and extend these results.

## CONCLUSION

This study concludes that senior citizens in Barangay Tumana, Marikina City have very high access to health services in terms of Availability, Accessibility, Acceptability, Affordability, and Accommodation. The Barangay Health Center effectively meets the needs of mostly low-income elderly respondents. It is recommended to sustain and strengthen barangay health programs to ensure continuous and equitable healthcare for the aging population.

## IMPLICATIONS FOR NURSING AND HEALTH SCIENCES

This study serves as a reference for senior citizens to improve health literacy and for nursing administration and barangay health workers to sustain accessible and affordable elderly health programs. It also provides policymakers and future researchers a foundation to identify barriers and develop targeted interventions that increase health service utilization among older adults.

## ACKNOWLEDGEMENT

We thank the Almighty God for His guidance, our research adviser Mr. John Bobbie Roca, RN, MAN, PHSAE for his mentorship, and the Barangay Officials, Health Workers, and Senior Citizens of Brgy. Tumana for their support. We also thank Brgy. Malanday for the pilot testing and our families for their encouragement.

## AUTHOR CONTRIBUTION

S.M.B.G: Conceptual Framework, Research Design, Conclusion, & Limitations. A.G.B: Participants and Sampling Technique. J.M.C.C: Significance of the Study, Research Instruments, & Implications. A.R.D.G: Introduction & Research Design. K.S.P: Hypothesis & Implications. L.M.B.P: Theoretical Framework, Research Instruments, & Summary of Findings. M.A.G.P: Data Analysis. Everyone: Chapter 3 & Recommendation.

## FUNDING

This research received no external funding.

## CONFLICT OF INTEREST

The authors declare no conflict of interest.

## DATA AVAILABILITY

The de-identified data and survey instruments used in this study are stored on a password-protected, encrypted google drive account accessible only to the primary researchers. In compliance with the Data Privacy Act of 2012, all data will be retained for three (3) years to allow for verifications, follow-ups, or inquiries, after which the digital files will be permanently deleted. The data may be made available upon reasonable request and with the approval from the concerned authorities of Barangay Tumana.

## REFERENCE

- Cabanero-Garcia, E. et al. (2025). *Barriers To Health, Social And Long-Term Care Access Among Older Adults: A Systematic Review Of Reviews*. <https://link.springer.com/article/10.1186/s12939-025-02429-y>
- Cadangdang, R. et al.,(2024). *Health Care Access and Quality of Life of Community-Dwelling Senior Citizens in Pampanga, Philippines*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11440559/>
- Carandang, M. L., et al. (2024). *Barriers to healthcare access in underserved Philippine communities: A socioecological perspective. Philippine Journal of Public Health*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10481217/>
- Eding, X.A. et al. (2020). *Tumana Marikina Flood Resilience*. <https://www.scribd.com/document/774624235/TUMANA-MARIKINA-FLOOD-RESILIENCE>
- Pallen, J., & Pascual-Dormido, Y. (2025, April 22). *Senior citizens' satisfaction with barangay health care services. International Multidisciplinary Journal of Research & Innovation in Science, Technology & Engineering*. <https://risejournals.org/index.php/imjrise/article/view/1044>
- Serafica, R., Reyes, A. T., Cacciata, M. C., Kawi, J., Leyva, E. W. A., Sy, F. S., & Evangelista, L. S. (2025). *Bridging the gap: Reducing health inequities in access to preventive health care services in rural communities in the Philippines. Journal of Transcultural Nursing*, 36(1), 24–33. <https://doi.org/10.1177/10436596241271270>
- Statistics How To (n.d.). *Slovin's Formula: What is it and When do I use it?* <https://www.statisticshowto.com/probability-and-statistics/how-to-use-slovins-formula/>